



**MTU**

Ollscoil Teicneolaíochta na Mumhan  
Munster Technological University

## OBJECT ORIENTED PRINCIPLES.

Lab07\_Group\_A: Inheritance and Dynamic Polymorphism.

On this lab a simple Java application is proposed.

- The folder **src** contains the code of the Java application.
  - o MyMain.java => This class tests the functionality of Lab07\_Group\_A. This class is provided completed, so you must not modify it.
  - o Language.java => A Java class modelling the concept of a language. You must complete this class.
  - o ProgrammingLanguage.java => A Java class modelling the concept of a ProgrammingLanguage. You must complete this class.
  - o OOPLanguage.java => A Java class modelling the concept of an OOPLanguage. You must complete this class.
- The folder **javadoc** contains the documentation of the Java application.
  - o MyMain.html => This file contains the description of the class MyMain.java.
  - o Language.html => This file contains the description of the fields, constructor, get method and extra functionality of the class Language.java.
  - o ProgrammingLanguage.html => This file contains the description of the fields, constructor, get method and extra functionality of the class ProgrammingLanguage.java.
  - o OOPLanguage.html => This file contains the description of the fields, constructor, get method and extra functionality of the class OOPLanguage.java.
- The folder **results** contains the expected results of the Java application.
  - o Option1.txt => This file contains the output obtained from running the lecturer's solution when running the main method with option 1, to test the class Language.
  - o Option2.txt => This file contains the output obtained from running the lecturer's solution when running the main method with option 2, to test the class ProgrammingLanguage.
  - o Option3.txt => This file contains the output obtained from running the lecturer's solution when running the main method with option 3, to test the class OOPLanguage.

### Actions:

1. Create a new project using the IDE and import the files MyMain.java, Language.java, ProgrammingLanguage.java and OOPLanguage.java into it.
2. Complete the code of the class Language.java, ProgrammingLanguage.java and OOPLanguage.java. The fields, constructor, get method and extra functionality must

follow the description given by the Javadoc files Language.html, ProgrammingLanguage.html and OOPLanguage.html (the files are provided in PDF as well, just in case you cannot see well the html file).

3. Use the result files to compare your results to the expected ones.